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RETURN DATE: JANUARY 31, 2017

ALFRED SWINTON

SUPERIOR COURT

V.

J. D. OF HARTFORD

STATE OF CONNECTICUT

January 6, 2017
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PETITION FOR NEW TRIAL

Alfred Swinton ("Petitioner"), by and through his undersigned counsel, respectfully petitions this Honorable Court for a New Trial in the above-captioned matter in the interests of justice and pursuant to the Fifth, Sixth, and Fourteenth Amendments to the United States Constitution; Article I, Sections 8 and 10 of the Connecticut Constitution; Section 52-270 of the Connecticut General Statutes; and Section 42-55 of the Connecticut Practice Book.

OVERVIEW

1. This petition is based on newly-discovered DNA evidence which was not available or discoverable at the time of Petitioner's trial and conviction although he used all reasonable diligence in endeavoring to find evidence and testimony in his favor. Said newly-discovered DNA evidence is exculpatory, material to the question of who committed the crime at issue, not cumulative, relevant for purposes other than to impeach a witness, and would have likely produced a different result had such evidence been presented at Petitioner's trial.

2. In 2001, Petitioner was convicted of the murder of Ms. Carla Terry. Since his initial arrest in 1991, Petitioner has consistently maintained his innocence. Based on the lack of evidence to establish probable cause, Petitioner was initially released after his arrest in 1991. It was only after a second probable cause hearing nearly seven years later, in 1998, that Petitioner was charged with murder.

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HARTFORD J.D.

3. There were only two pieces of physical evidence that the State introduced at trial to attempt to link Petitioner to the victim:¹ (a) a bra alleged to have been worn by the victim on the night of her death, which was found in a common area of the basement in Petitioner's apartment building, in a box full of items belonging to a former tenant of that building; and (b) the expert opinion of a forensic odontologist who testified he was medically certain that bite marks on the victim's breasts were inflicted by Petitioner at the time of the murder.

4. At the time of trial, laboratories were not yet testing for "wearer" or "touch" DNA to determine whether the bra actually was the one worn by the victim, or whether it included any biological material from any other person who may have touched it, such as the perpetrator.

5. The State took swabs of the bite marks on the victim's breasts ("the Bite-Mark Swabs"). In 1992, they tested positive for amylase, which indicates there was saliva from the biter that was recovered from the victim's body.

6. The DNA testing technology available at the time of Petitioner's trial could not generate the genetic profile of the saliva source.

7. Now, based on recent testing by the State of Connecticut Division of Scientific Services ("the State Forensic Science Laboratory") using more advanced DNA testing techniques, newly discovered DNA evidence excludes Petitioner as the source of the saliva from the bite marks on the victim, and excludes Petitioner and the victim as the source of the DNA on the bra she was allegedly wearing on the night of her death.

8. Specifically, the newly discovered evidence in Petitioner's case includes:

(a) DNA test results which exclude Petitioner as the source of the male DNA on a swab taken of the bite marks on the victim's breasts—thereby establishing that Petitioner was not the perpetrator who inflicted those bites (State of Connecticut, Supplemental DNA Report IV (June 25, 2015), attached hereto as Ex. 1);

(b) DNA test results which exclude both the Petitioner and the victim as the

¹ Although the State collected extensive biological material from the crime scene, as well as from Petitioner's person, residence, and vehicle, none of this forensic evidence linked Petitioner to the victim or to crime scene. The State also did not introduce testimony from anyone who witnessed the murder or saw Petitioner at the crime scene.

source of DNA on a bra that the victim was purportedly wearing on the night before her death, (Trial Ex. 79-A)—thereby establishing that the lone piece of physical evidence purportedly linking Petitioner to the victim was not worn by the victim or even handled by Petitioner (State of Connecticut, Supplemental DNA Report (Sept. 4, 2014), attached hereto as Ex. 2); and

(c) the recent complete renunciation of the scientific testimony presented at trial by the State's bite-mark expert based on (i) the above-referenced newly discovered DNA evidence excluding Petitioner as the source of the saliva on the victim's breasts and (ii) the new, overwhelming consensus of the scientific community that the bite-mark analysis he offered at trial as conclusive evidence of guilt is grossly unreliable, and lacks any valid scientific basis (Affidavit of Constantine P. Karazulas, DDS, attached hereto as Ex. 3).

9. With the forensic evidence against Petitioner now entirely eliminated, and with new affirmative evidence of his innocence—DNA evidence excluding Petitioner as the source of genetic material found on the victim's body—the State's case against Petitioner has been radically altered. Under such circumstances, a new trial should be granted.

PROCEDURAL AND FACTUAL HISTORY

10. Carla Terry's body was found by a police officer at 4:55 a.m. on the morning of January 13, 1991, lying on top of a snowbank, partially wrapped in a plastic bag.

11. The victim was wearing numerous items of clothing, but she did not have on any undergarments. The police collected a wide range of physical evidence from the crime scene, none of which was associated with Petitioner.

12. Shortly after the victim's murder, Petitioner was identified as a suspect based on witness reports that he was among the numerous patrons in a bar where the victim had been seen on the night of her death.

13. The State executed warrants to search Petitioner's person, apartment, apartment building, and vehicle, and collected, *inter alia*, blood samples, hair samples, clothing, a plastic bag, a blanket and wash cloth, boots, fingernail scrapings, dental impressions, and a women's brassiere.

14. The State thereafter submitted dozens of items to the State Forensic Science Laboratory in January 1991.²

15. While none of the foregoing physical items connected Petitioner to the victim, he was nonetheless arrested and charged with Ms. Carla Terry's murder on June 25, 1991.

16. At Petitioner's initial probable cause hearing on August 5, 1991, the State introduced a report from a forensic odontologist, Dr. Lester Luntz, which claimed that Petitioner's teeth could be linked to the alleged bite marks on the victim's body. No evidence or testimony relating to any of the victim's undergarments was introduced at that proceeding.

17. The court concluded that the evidence was insufficient to establish probable cause and Petitioner was released.

18. In May of 1992, the State Forensic Science Laboratory issued a report identifying amylase on the Bite-Mark Swabs, indicating that saliva was present in them. As discussed below, prior to Petitioner's trial, the State Forensic Laboratory attempted to perform DNA analysis on the Bite-Mark Swabs but there was insufficient DNA to yield results.

19. The case then went "cold" for several years. Nearly seven years later, on October 8, 1998, Petitioner was again arrested and charged with the murder of Ms. Carla Terry.

20. At the second probable cause hearing, which was held on November 18, 1998, and on January 6-8, 1999, the State for the first time introduced as evidence a bra that was found by the police in March 1991 in a cardboard box in the basement of a multi-unit building in which Petitioner resided. Both Petitioner and the landlord of the building, Mr. Ed Manners, had access to the basement where that cardboard box was found.

21. The abandoned box did not belong to Petitioner; it had been left behind by prior tenants of a commercial unit in the building, and contained guitar straps and some clothing, including the bra.

² At that time, the laboratory was called the State of Connecticut, Division of State Police, Forensic Science Laboratory.

22. The victim's sister, Ms. Laverne Terry, had been shown this bra in March 1991 to see whether she recognized it as the one that her sister had been wearing the last time she saw her. At that time, only months after the homicide, Ms. Laverne Terry told the police that the bra had never belonged to her, and it did not even look like a bra that she would have given to the victim.

23. Contrary to her initial statements regarding that bra, Ms. Laverne Terry testified at the second probable cause hearing in 1998 that the bra belonged to her niece and that she had loaned it to her sister Carla on the night she was murdered. She testified that she had pinned the bra for her sister and noted that the pin was missing from the bra that she was shown at the 1998 probable cause hearing.

24. The State also introduced new bite-mark comparison evidence through a new expert, forensic odontologist Dr. Constantine Karazulas. He testified—based upon a reasonable degree of scientific certainty—that Petitioner "caused the bite mark that is depicted in the photographs" of the victim's breasts. He also claimed to be able to identify when the injury was inflicted, asserting the bite had to have been made "just before or at the time of death."

25. Based on Ms. Laverne Terry's new claims concerning the bra, and the newly inculpatory bite-mark testimony, the court found probable cause to charge Petitioner for murder.

26. Petitioner pled not guilty. The evidentiary portion of his trial began on January 22, 2001, and ended on March 19, 2001.

27. At trial, the prosecutor relied primarily on the same two pieces of evidence that were newly introduced at the 1998 probable cause hearing: (a) the bra; and (b) Dr. Karazulas's testimony that Petitioner was the only person who could have produced the alleged bite marks on the victim's breasts, and must have done so at or about the time of the murder.

28. The victim's sister, Ms. Laverne Terry, testified at trial that she had helped the victim get ready to go out on the night she was killed. Among other things, Ms. Terry testified that the victim was wearing white panties and a white hat. Those items were not found on or with the victim, and were not ever recovered by the police.

29. The police did recover a bra—which had no label and which was not found with any of Petitioner's belongings—in a box full of guitar straps from a

former commercial tenant in a common area of the basement of Petitioner's multi-unit apartment building.

30. Ms. Terry testified that the bra had belonged to her niece, and that she had helped the victim pin the bra's strap because it was too big. However, when Ms. Terry was first shown the bra in March 1991, only two months after the murder, she did not offer this account. Furthermore, Ms. Terry told a magazine reporter that when she first saw the bra, she smelled it, but she could not smell her sister on it.

31. The State's theory at trial was that Petitioner took the bra from the victim at the time of her murder and kept it as a trophy (even though the bra was found in a common area in a box of a former commercial tenant's belongings).

32. No DNA evidence relating to this bra was introduced at trial.

33. The only forensic evidence directly linking Petitioner to the crime was the extensive testimony of Dr. Karazulas, a forensic odontologist with then-forty years of experience who testified at trial over the course of five days.

34. At the time of trial, Dr. Karazulas was the Chief Forensic Odontologist of the Connecticut State Police Forensic Science Laboratory, a position that he had held for more than 15 years as of 2001. Over the course of his career, he reviewed and investigated thousands of bite marks, and consulted on between 50 and 100 bite-mark cases.

35. Based on his training and experience, and on his understanding of the consensus of the scientific community as of 2001, he testified that bite mark analysis and comparison was an exact science, capable of identifying the single individual who produced a bite mark to the exclusion of all other potential biters.

36. Dr. Karazulas also claimed that Petitioner's dentition, i.e., the arrangement of the biting surface of his front teeth, was unique. That uniqueness, Dr. Karazulas claimed, was accurately transferred and permanently recorded in the skin of the living victim, which allowed him to definitively identify Petitioner as the one and only possible biter, based on autopsy photos taken of the injury nearly three days after the victim's death.

37. Dr. Karazulas testified that comparing hand-drawn outlines of dentitions to the posthumous photograph of an alleged bite mark was (at that time) widely accepted as a technique capable of identifying the individual responsible for

producing that mark. He testified that he applied those then-prevailing standards to compare photographs of the bite marks on the victim to Petitioner's dentition.

38. After comparing his outlines of Petitioner's teeth to the photograph, he opined at trial to "a reasonable medical certainty without any reservation that [the bite] marks [on the victim's breasts] were created by [Petitioner]." He described this as the "highest degree of medical certainty" that could possibly be offered regarding a match of an individual's dentition to a bite mark.

39. The State also introduced testimony from several individuals who saw the victim the night of her death.

40. Hector Freeman, an acquaintance of the victim, testified that he saw her at around one o'clock in the morning on January 13, 1991 at the Oakland Terrace Cafe. He agreed to take her home, but first drove her to Kenney's Grill, a bar that was then located on Barbour Street, where he bought her a drink. Mr. Freeman did not see the Petitioner at the bar.

41. Darlene Chappell, who was working as a bartender at Kenney's Grill that night, testified that she saw both Petitioner and the victim at the bar that evening but that Petitioner left the bar before the victim did.

42. Martha Point-DuJour, a customer, testified that she saw and heard Petitioner and Carla Terry having a normal conversation at Kenney's Grill. She testified that Petitioner left the bar after the victim left with Mr. Freeman.

43. While the witnesses gave conflicting testimony as to whether Petitioner was at the bar and, if so, when he left, it was undisputed that the victim left Kenney's Grill with another man (Mr. Freeman).

44. Shortly before 2:00 a.m., Mr. Freeman left the bar with the victim and drove her to the home of her sister, Rhonda Terry. Mr. Freeman did not observe anyone following his car as he took the victim home, and she did not tell him she planned to meet anyone later.

45. The victim was last seen alive early in the morning of January 13, 1991, by her sister Rhonda Terry after the victim exited Mr. Freeman's car. Rhonda Terry testified that she heard the victim arrive outside of her apartment "a little after two" and watched her get out of Mr. Freeman's car. The victim called out that she would

return shortly and that she was going to stay with Rhonda Terry that night. The victim then walked across the street and out of view.

46. Mr. Freeman claimed that after dropping the victim off, he went to see a friend in a neighboring building, but stayed only a few minutes.

47. There was no evidence of the victim's activities after the time Rhonda Terry saw her walking away from Mr. Freeman's car, and the State presented no testimony from anyone who witnessed the victim's death.

48. The State presented testimony from three individuals who were drug users and/or convicted felons, and who purportedly heard Petitioner make certain statements relating to the victim in the months after her death.

49. Ms. Mary Alice Mills testified that, although she did not remember exactly what he had said, Petitioner stated in 1991 that he "got away with murder." At the time that she allegedly overheard this statement, she was drinking alcohol, and "getting stoned."

50. Mr. James Arnold, an inmate at the Webster Correctional Institution and an admitted heroin addict, claimed he had two conversations with the Petitioner in 1991, during which Petitioner allegedly told him that he bit the victim.

51. Ms. Cynthia Stallings, a habitual drug user, testified that, in August 1991, Petitioner stated that he was not innocent of Ms. Carla Terry's murder, and that the authorities "had" him "through the teeth marks" that were found on the victim's breasts.

52. In addition, the State introduced portions of a tape recording of a 1993 interview of Petitioner by freelance writer, Karon Haller, who admitted supplying Petitioner with hard liquor throughout the interview. Ms. Haller selected excerpts of this interview to feature in her article entitled "Killer at Large."

53. While the article sensationally implied that Mr. Swinton made self-incriminating statements, the actual, unedited tape of the interview shows that Petitioner consistently professed his innocence and maintained that someone other than he was responsible for the victim's death. Nor did her article mention the fact that she had supplied Petitioner with at least four glasses of Chivas Regal liquor during their talk.

54. Finally, the State offered uncorroborated testimony from Michael Scalise, a twenty-two-year-old inmate who, in addition to his testimony against Petitioner, claimed many other inmates had also confessed various other crimes to him.

55. Mr. Scalise had been serving as a jailhouse informant to police in multiple unrelated cases prior to the time that he began working with the State on Petitioner's case.

56. Mr. Scalise, who was serving a prison sentence in same facility as Petitioner, told the Police he thought Petitioner was a "retard" and a "dirt bag." He testified that Petitioner confessed to him alone that he had killed Carla Terry and dumped her in a snowbank. Mr. Scalise further stated that Petitioner told him that he took the victim's bra, and that he bit Ms. Terry on her breasts after having sex with her.

57. The Police then outfitted Mr. Scalise with a concealed wire to tape conversations with Petitioner.

58. On the secretly recorded conversations, however, Petitioner did not make any incriminating statements. Instead, as he done had during Ms. Haller's interview, Petitioner continued to profess his innocence, proclaiming "I am not a murdere[r]" and asking "why are they picking on me?"

59. In the taped conversation, Petitioner also rebuffed Mr. Scalise's suggestion that Petitioner should lie to the Police about socks allegedly belonging to the victim,³ and that he ask his brother to lie. Petitioner refused to do so.

60. Following the trial, Petitioner was convicted and sentenced to a term of incarceration of sixty years. Petitioner filed an appeal on August 14, 2002; his appeal was denied on May 11, 2004.

61. Since the trial, the State performed new DNA testing on vaginal and anal swabs of the victim. In its Report dated July 29, 2014, the State Forensic Science Laboratory amplified the DNA samples from the vaginal and anal swabs using the newly available AmpF/STR Identifiler Plus procedure. The results excluded the Petitioner as a contributor to the DNA profiles from both the vaginal

³ Although the socks at issue were not introduced at trial, additional DNA testing performed by the State in 2014 using more advanced DNA testing techniques eliminated both Petitioner and the victim as the source of the DNA on the socks. (Ex. 2, ¶ 4.)

and anal swabs and show the presence of an unknown male's DNA who is not the Petitioner.

62. Although Petitioner was never charged with sexually assaulting the victim, the manner in which the victim's body and clothing were found strongly indicates that she was sexually assaulted. Significantly, there is no forensic evidence of any sexual contact between Petitioner and the victim while new DNA results show the presence of another male's DNA.

COUNT ONE: Newly Discovered DNA Evidence Excludes Petitioner as The Source of the Bite Marks on the Victim's Breasts

63. Paragraphs 1 through 62 above are incorporated by reference in this Count One as if fully set forth herein.

64. As discussed in detail above, the expert testimony of Dr. Karazulas that Petitioner produced the bite marks found on the victim was the only purported forensic link between Petitioner and the victim. Newly discovered DNA evidence completely severs this link.

65. During the victim's autopsy, the police collected the Bite-Mark Swabs. Recognizing how significant the Bite-Mark Swabs were to identifying the victim's assailant, the police submitted the Bite-Mark Swabs, along with other evidence from the victim's body and crime scene, to the State Forensic Science Laboratory. (*See* State of Connecticut Forensic Science Laboratory Report (May 4, 1992), attached hereto as Ex. 4.) Significantly, that examination and testing identified amylase on the right and left breast Bite-Mark Swabs, which indicates that they contained saliva from the person who bit and killed the victim. (*Id.*)

66. Before trial, in 2000, the State Forensic Science Laboratory performed DNA testing on the Bite-Mark Swabs. (State of Connecticut, Forensic Science Laboratory Report (May 16, 2000), attached hereto as Ex. 5, ¶1 (Submissions #0007 and #0008).) In its DNA Report dated May 16, 2000, the laboratory concluded that although DNA was extracted from both swabs, there was "[i]nsufficient DNA was recovered from submissions #0007 and #0008 for further testing." (Ex. 5, ¶2.)

67. In other words, the laboratory detected DNA in the Bite-Mark Swabs, but there was not enough to generate a genetic profile using the AmpF/STR Profiler Plus testing kit that was available as of 2000. That testing kit has more recently been replaced by more sensitive STR testing kits.

68. Since 2000, when pre-trial DNA testing in Petitioner's case was conducted, and since 2001, when Petitioner's trial was held, the sensitivity and specificity of technology for amplifying and analyzing DNA samples has improved dramatically (especially for the sort of limited-quantity samples that were obtained in this case).

69. In 2014 and 2015, Petitioner requested that the State perform new DNA testing on evidence collected during the investigation of the victim's death. With the assistance of the Connecticut Innocence Project and the collaboration of the Office of the State's Attorney, and pursuant to funding provided by a federal Bloodsworth Grant, the requested testing was performed using the latest technology.

70. The Identifiler Plus® kit, which was only first validated in 2012,⁴ was used by the State Forensic Science Laboratory to test the Bite-Mark Swabs in 2014. The Identifiler Plus kit has been shown to be at least twice as sensitive as the most advanced kits that were available in 2001 (and that were utilized by the State lab to unsuccessfully test the evidence from this case). The newer Identifiler Plus kit is able to yield a more comprehensive DNA profile (i.e., more genetic information) than had previously been possible with such samples.

71. The State Forensic Science Laboratory detected male DNA on the right breast Bite-Mark Swab. Petitioner was **eliminated as a contributor** the male DNA from the Bite-Mark Swab. (Ex. 1, ¶¶7-8.)

72. The new DNA evidence excludes Petitioner as the source of male DNA from the Bite-Mark Swab, and therefore excludes him as the source of the bite marks on the victim's breasts.

73. The newly discovered DNA evidence warrants a new trial.

74. The newly discovered DNA evidence from the Bite-Mark Swab was not available to the Petitioner or his counsel at the time of his trial, nor could it have been discovered by the exercise of due diligence, because the technology that was used to generate the genetic profile from the Bite-Mark Swab would not be developed for more than a decade after Petitioner's trial.

⁴ Wang, D., Chang, C., Lagacé, R., *et al.* Developmental validation of the AmpF/STR® Identifiler® Plus PCR Amplification Kit: an established multiplex assay with improved performance. *Journal of Forensic Sciences*. (2012) 57(2): 453-465.

75. The more sensitive Identifiler Plus kit that was necessary to obtain DNA results from the Bite-Mark Swab was not available in 2001 at the time of trial. The AmpF/STR Profiler Plus test kit available at that time was used by the State to test the evidence but it could not yield a result.

76. The newly discovered DNA evidence would also be material on a new trial, and it is not merely cumulative to other evidence offered at trial. The testimony from Dr. Karazulas identifying Petitioner as the source of the bite marks of the victim was the State's only forensic evidence linking Petitioner to the crime scene or victim.

77. The newly identified DNA from the Bite-Mark Swab is directly material to the question of who killed the victim. The State's theory at trial was that because Dr. Karazulas identified Petitioner as the one and only individual who could have produced the bite marks on the victim, then he must have been the one who murdered the victim, because there was no question that the person who bit the victim was also the person who killed her. Petitioner's exclusion as the source of saliva in the Bite-Mark Swab scientifically establishes that, contrary to the forensic testimony Dr. Karazulas offered at trial, Petitioner is not the person who bit and killed the victim.

78. Dr. Karazulas was the only forensic expert offered by the State during Petitioner's trial, and he gave exhaustive testimony explaining how "science" established that Petitioner was the one and only person capable of producing the bite marks found on the victim's breasts. According to him, the new DNA evidence from the Bite-Mark Swab would have been material to his analysis. (Ex. 3, ¶24.)

79. Specifically, Dr. Karazulas admitted that if he had been aware of the newly discovered DNA test results from the Bite Mark Swabs excluding Petitioner, then he would not have testified at trial that Petitioner was the source of the bite marks found on the victim's breasts. (Ex. 3, ¶25.)

80. This admission not only underscores how material the new DNA evidence is, but it also demonstrates that the newly discovered evidence is likely to produce a different result in a new trial, because it flatly contradicts evidence that Dr. Karazulas offered at trial (which would be unavailable in any event at a new trial). In addition, it casts new and substantial doubt on the hearsay testimony that Petitioner had made self-incriminating statements about the murder and the bite marks.

81. In light of the foregoing, the verdict and judgment against Petitioner are unjust and should be reversed, and a new trial should be ordered.

COUNT TWO: Newly Discovered "Wearer/Touch DNA" Evidence Excludes Both the Victim and Petitioner as Sources of DNA Found on the Bra

82. Paragraphs 1 through 81 above are incorporated by reference in this Count Two as if fully set forth herein.

83. Apart from the now-renounced bite-mark evidence, the only other physical evidence that the State used to attempt to connect Petitioner to the victim was a bra found in an abandoned box with the guitar straps and odds and ends left by former tenants in the common area of the multi-unit building where Petitioner lived. (Trial Ex. 79-A.)

84. The bra was identified by Ms. Laverne Terry, who claimed that it was her niece's bra and that the victim wore it the night she was killed.

85. While the bra was also submitted by the State Forensic Science Laboratory for examination prior to trial, it was only examined for blood and fibers. (See Ex. 4, p. 4.)

86. In contrast to the standard procedures utilized at the time of Petitioner's trial, laboratories now routinely perform DNA testing on items handled or worn by perpetrators or victims. This is because current technology allows an analyst to develop the DNA profile of a person who wore or handled an item through testing of skin cells that are shed on items of clothing that people wear (known as "wearer DNA") or items that people touch (known as "touch DNA").

87. More advanced DNA testing kits and techniques developed after Petitioner's 2001 trial have significantly increased the ability of laboratories to analyze skin cells left behind on items of clothing (i.e., wearer DNA and/or touch DNA).

88. In 2014, the State Forensic Science Laboratory performed DNA analysis on swabs taken from the inside surface of the bra, using the new amplification and analytical techniques discussed above. This sample was identified as Item #18-S1 in the State's Supplemental DNA report, dated September 4, 2014. (See Ex. 2, ¶4.)

89. The State determined that the victim is excluded as the source of DNA found on the inside surface of the bra. (*Id.*)

90. This exclusion is significant because the victim's body would necessarily have come into contact with the inside surfaces of the bra if she had actually been wearing it on the night of her murder, as was the State's theory at trial. The absence of the victim's DNA on the bra indicates that, consistent with the original statements from Ms. Laverne Terry, the bra collected from the basement of the building where Petitioner stayed was not the one that the victim was wearing on the night of her death.

91. Notably, Petitioner was also excluded as the source of the DNA found on that bra. (*Id.*)

92. The absence of any of Petitioner's DNA on an item that the State argued he took from the victim casts new and substantial doubt on the State's theory that the bra belonged to the victim and was taken by Petitioner as a trophy.

93. In short, the new DNA test results from the bra provide compelling exculpatory evidence establishing that the bra did not belong to the victim and that it had no connection to Petitioner.

94. The newly discovered DNA evidence from the bra was not available to Petitioner or his counsel at the time of his trial, nor could it have been discovered by the exercise of due diligence, because at that time DNA analysts did not test items for wearer and touch DNA.

95. In addition, the newly discovered DNA evidence from the bra would be material at a new trial, and it is not merely cumulative to other evidence offered at trial.

96. The materiality and non-cumulative nature of these new, previously unavailable DNA test results is underscored by the pivotal importance of the bra to the State's case. At the Petitioner's 1991 probable cause hearing, when Ms. Laverne Terry did not testify about the bra or identify it as the one that she had pinned for her sister to wear the night before her death, the Court determined that there was insufficient evidence to charge Petitioner with murder.

97. In contrast, at the 1998 probable cause hearing, Ms. Laverne Terry testified that the bra was the one that her sister had worn on the night of her murder,

and also that she had helped her sister adjust it that night with a pin. After that testimony was introduced, probable cause was found to try Petitioner for Ms. Carla Terry's murder.

98. In his closing argument, the prosecutor characterized the bra as "an enormous and extremely important piece of evidence" that was uniquely connected to both Petitioner and the victim.

99. The newly discovered DNA evidence is also likely to produce a different result in a new trial. Had Petitioner's jury been told that the DNA evidence excluded both the victim and Petitioner from the bra, the probative value of the bra would have been all but eliminated.

100. In addition, this new, previously unavailable DNA evidence casts fundamental doubt on the testimony of Ms. Laverne Terry, who identified the bra as the one that her sister had worn, and on the testimony of others, such as inmate Michael Scalise, who claimed that Petitioner had admitted to taking the victim's bra after her murder.

101. In light of the foregoing, the verdict and judgment against Petitioner are unjust and should be overturned, and a new trial should be ordered.

COUNT THREE: Newly Discovered Renunciation of Bite-Mark Expert Testimony by the State's Expert and the Scientific Community's Recent Repudiation of Individualized Bite-Mark Identification Further Destroys the State's Case

102. Paragraphs 1 through 101 above are incorporated by reference into this Count Three as if fully set forth herein.

103. At Petitioner's trial, the State relied heavily on the testimony of Dr. Karazulas, a forensic odontologist, to link Petitioner to what he identified as bite marks from postmortem photographs taken of the victim's body.

104. The prosecutor elicited Dr. Karazulas's impressive forensic credentials, including the fact he was the Chief Forensic Odontologist of the Connecticut State Police Forensic Science Laboratory at the time of trial and had been for over 25 years, and that he served as a consultant to police departments throughout Connecticut. Dr. Karazulas testified that over the course of his career, he reviewed, investigated, and consulted on thousands of bite-mark cases.

105. Dr. Karazulas testified at trial to "a reasonable medical certainty without any reservation that [the bite] marks [on the victim's breasts] were created by [Petitioner]." He further testified that those bite marks were unique and could have been produced by only one person: Petitioner. He also testified to a reasonable degree of medical certainty that the bite mark was inflicted within 10 minutes of the victim's death.

106. Petitioner has newly discovered that Dr. Karazulas has renounced all of the opinions he gave at trial. In light of the contemporary scientific understanding of the unreliability of bite mark analysis, no reputable scientist, including Dr. Karazulas, would today identify the "the biter" in any bite-mark case, even absent DNA evidence excluding the putative biter.

107. The newly discovered DNA test results from the Bite-Mark Swabs excluding Petitioner as the source of DNA from them conclusively demonstrates that Dr. Karazulas incorrectly identified Petitioner as the source of the bite marks on the victim.⁵

108. Dr. Karazulas now affirms that, independent of the scientific community's repudiation of bite mark evidence, he would not have offered his opinion at trial if he had been aware of these newly discovered DNA results. (Ex. 3, ¶24.)

109. However, independent of this newly discovered DNA evidence, Dr. Karazulas has separately determined that there is no longer a valid scientific basis for the bite-mark analysis that he offered at trial, and has therefore completely renounced that expert testimony. The reason for his renunciation is that since he testified at Petitioner's trial in 2001, the scientific community has rejected entirely the basis for his trial testimony, which had allowed the State to argue that "scientific" evidence conclusively established Petitioner's guilt.

110. In particular, Dr. Karazulas highlights the 2009 Report by the National Academy of Sciences ("the NAS Report"), the country's most respected scientific

⁵ At the time of Petitioner's trial, no defendants convicted based on bite-mark evidence had been exonerated after newly discovered DNA evidence proved that the bite-mark identification was false. Since Petitioner's trial, bite-mark analysis has been proven to be false (leading to overturned convictions or indictments) in at least *twenty-eight* cases. See <http://www.innocenceproject.org/wp-content/uploads/2016/03/Description-of-Bite-Mark-Exonerations-as-of-July-2016-1.pdf>

institution and his subsequent research, as a turning point in his professional career. (Ex. 3, ¶15.)

111. The NAS Report included the first comprehensive study of bite-mark literature and analysis by a neutral group of scientists. (*Id.*, ¶12.) When subjected to the scrutiny of his highly respected scientific organization, the validity and reliability of bite-mark analysis—such as the one that Dr. Karazulas performed in Petitioner's case—was repudiated.

112. The NAS Report determined that there is no scientific basis for forensic odontologists to proffer individualization testimony—namely, testimony concluding that a suspect is "the biter" to the exclusion of all other potential sources of that bite mark. (Ex. 3, ¶13.) This was precisely the conclusion that Dr. Karazulas offered at Petitioner's trial (i.e., identifying Petitioner as the one and only possible "biter" who could have produced the marks on the victim's breasts).⁶

113. Additionally, the NAS Report concluded that there is no scientific foundation for the two most fundamental premises of forensic odontology: (a) that human dentition is unique and (b) that, even assuming human dentition can be unique, human skin is capable of faithfully recording any such uniqueness. (Ex. 3, ¶13.)

114. Dr. Karazulas relied upon both of the foregoing, now-discredited premises in his testimony at Petitioner's trial.

115. The NAS Report further determined that, separate and apart from invalid individualization conclusions, forensic odontologists have not established any objective criteria or standards for determining whether a particular suspect's could even be associated with a particular bodily injury.

116. Since the NAS Report was published, additional studies have further discredited the sort of evidence that Dr. Karazulas offered at Petitioner's trial.

⁶ This finding by the NAS is consistent with a more recent study conducted by the American Board of Forensic Odontology ("the ABFO"), which assembled a highly experienced panel of 39 forensic odontologists, and asked them to examine 100 patterned injuries. The results were staggering, and demonstrate the inherently unreliable nature of bite-mark comparisons. Of the 100 injuries examined, the odontologists agreed on the question of whether the injury was even a bite-mark in only 4 cases. Radley Balko, *A Bite Mark Matching Advocacy Group Just Conducted a Study that Discredits Bite Mark Evidence*, Wash. Post (Apr. 8, 2015).

117. In February 2016, the Texas Forensic Science Commission ("TFSC") took the extraordinary step of recommending a moratorium on the use of any bite-mark evidence in criminal trials.⁷ After a thorough, six-month investigation, the TFSC concluded—just as the NAS did—that the validity of bite-mark comparison evidence has not been scientifically established.

118. Then, in September 2016, the President's Council of Advisors on Science and Technology ("PCAST"), an advisory group of the nation's leading scientists and engineers, published a report entitled "Forensic Science in Criminal Courts: Ensuring Scientific Validity of Feature-Comparison Methods."

119. Like virtually every other independent scientist and scientific body, PCAST found that bite-mark comparison evidence is "clearly scientifically unreliable" at present. PCAST determined that the flaws with bite-mark evidence go to its very foundation, finding that what little research has been done "cast[s] serious doubt on the fundamental premises of the field," including the distinctiveness of the dentition and the ability of the human skin to reliably record that distinctiveness.

120. Moreover, PCAST found that "[e]mpirical research suggests that forensic odontologists do not consistently agree even on whether an injury is a human bitemark at all."⁸ In other words, reliable scientific evidence demonstrates that forensic dentists cannot tell whether an injury is even a bite mark, to say nothing of who might have inflicted it.

121. PCAST found that while there are "[f]ew empirical studies . . . study[ing] the ability of examiners to accurately identify the source of a bitemark," of those that have been done, "the observed false positive rates were so high that the method is clearly scientifically unreliable at present."

⁷ Erik Eckholm, *Texas Panel Calls for an End to Criminal IDs via Bite Mark*, N.Y. TIMES (Feb. 12, 2016) (; see also Joe Palazzolo, *Texas Commission Recommends Ban on Bite-Mark Evidence*, WALL ST. J. (Feb. 12, 2016)) ("A Texas commission recommended on Friday that the state suspend the use of bite-mark evidence in criminal cases pending additional research, becoming the first agency in the nation to discredit a forensic technique that has come under intense scrutiny in recent years."); see also Texas Forensic Science Commission, Texas Bite Mark Case Review Panel, available at <http://www.fsc.texas.gov/texas-bite-mark-case-review>; Jon Herskovitz, *Influential Texas Panel Recommends Halt to Use of Bite-Mark Evidence*, Reuters, Feb. 11, 2016, available at <http://www.reuters.com/article/us-texas-bitemark-idUSKCN0VL001>. The Commission has not only recommended that bite marks no longer be admissible in criminal trials, but it has also begun to undertake a review of all Texas cases in which such evidence was used. *Id.*; see also Allan Turner, *Forensic Science Commission Urges Moratorium On "Bite Mark" Evidence In Texas Trial: Commission Deems It Flawed As Evidence*, Houston Chronicle (Feb. 12, 2016).

⁸ PCAST made these findings based on the ABFO study noted in fn. 4, *supra*.

122. PCAST's ultimate conclusion was that "bitemark analysis does not meet the scientific standards for foundational validity, and is far from meeting such standards."

123. Consistent with the consensus that has now emerged in the scientific community, Dr. Karazulas now understands and believes that human dentition is not uniquely capable of producing a given bite mark, and that human skin cannot reliably and accurately record the features of human dentition. These new scientific developments have compelled him, as a matter of professional ethics and civic duty, to correct and renounce all of the testimony that he offered at Petitioner's trial.

124. As set forth in his sworn affidavit, dated July 8, 2016, Dr. Karazulas no longer believes that Petitioner is the person who inflicted the bite marks on the victim, and now states for the first time that "many thousands of other individuals could have produced" the mark on the victim. (Ex. 3, ¶18.) He further states that, based on the current state of forensic odontology, he would not offer individualization testimony in any bite mark case and particularly not in the case of Petitioner. (*Id.*, ¶20.)

125. Dr. Karazulas testified at trial that the scientific community generally accepted that bite-mark analysis and comparison was capable of identifying and excluding a perpetrator of a crime. (Ex. 3, ¶16.) While that testimony was consistent with the scientific understanding as of 2001, he would not and could not offer such testimony today. The testimony that he gave is no longer consistent with the current scientific understanding of bite-mark analysis, and he has therefore renounced it. (*Id.*)

126. Dr. Karazulas also identified Petitioner as the individual who bit the victim. (Ex. 3, ¶¶17-18.) While that testimony was consistent with the scientific understanding as it then existed in 2001, he would not and could not offer such testimony today, because of how the scientific understanding of bite-mark analysis has changed since then. (*Id.*, ¶18.)

127. Dr. Karazulas identified certain characteristics of Petitioner's dentition as being uniquely and solely capable of producing the bite marks found on the victim's breasts. That is no longer his opinion, because the scientific community has rejected the use of such bite-mark evidence since the time that he testified. (Ex. 3, ¶19.) He has therefore renounced this testimony. Based on the understanding that he and the broader scientific community have recently come to, he would not and could not today offer testimony as to the uniqueness of any portions of Petitioner's

dentition, or whether those portions correspond to the injuries on the victim's breasts. (*Id.*)

128. Dr. Karazulas told the jury that, in his opinion, the arrangement of the biting surface of Petitioner's teeth, i.e., his dentition, was itself unique, and not consistent with the dentition of any other person. (Ex. 3, ¶19.) Although that opinion reflected the consensus of the scientific community at the time—i.e., that each individual has a unique dentition—that is no longer the case. (*Id.*, ¶21.) He has therefore renounced this testimony. (*Id.*)

129. Dr. Karazulas also opined that the bite marks were inflicted within ten minutes of the victim's death. He broadly based this conclusion on his experience and the experiments he conducted. However, contemporary scientific understanding does not support such a finding, and he has therefore renounced that testimony as well. (Ex. 3, ¶23.)

130. Dr. Karazulas's change in approach to his testimony is also consistent with the new standards that were recently announced by the ABFO. As of this year, those standards no longer permit testimony that purports to identify "the biter" or the "probable biter." Today, there are only three permissible categories of testimony for ABFO members that can be offered when comparing human dentition to a bite mark: (a) excluded as having made the bite mark; (b) not excluded as having made the bite mark; and (c) inconclusive.⁹

131. The new ABFO guidelines reflect a far more limited role for bite-mark comparison evidence than has previously been permitted—indeed, if these guidelines had been in place at the time of Petitioner's trial, then Dr. Karazulas's testimony would have violated them.

132. The newly discovered renunciation of Dr. Karazulas's testimony in light of the wholesale rejection of this sort of testimony by the scientific community was not available to the Petitioner or his counsel at the time of his trial, nor could it have been discovered by the exercise of due diligence, because Dr. Karazulas did not renounce his testimony until years after the trial.

133. The newly discovered evidence from Dr. Karazulas would be material on a new trial, and it is not merely cumulative. Dr. Karazulas was a central witness for the State, who testified over the course of five days, and he provided the only

⁹ See American Board of Forensic Odontology, Inc. Diplomates Reference Manual, at 102, available at <http://abfo.org/wp-content/uploads/2016/03/ABFO-Reference-Manual-03162016.pdf>, at 103.

purported forensic link between the victim and the Petitioner. His renunciation and the reasons for that renunciation could not be any more material to the question of Petitioner's guilt.

134. As such, the newly discovered evidence is very likely to produce a different result in a new trial, because it removes the State's single most important witness, and the eliminates the only potential forensic link between Petitioner and the murder.

CONCLUSION

135. The newly discovered DNA evidence **excluding** Petitioner as the source of DNA from bite marks found on the victim and the newly discovered DNA evidence excluding both Petitioner and the victim as the source of DNA found on a bra allegedly worn by the victim on the night of her death, coupled with the newly discovered renunciation of Dr. Karazulas, would be all but certain to result in acquittal at a new trial.

136. In light of the foregoing, the verdict and judgment against Petitioner are unjust and should be overturned, and a new trial should be ordered.

WHEREFORE, Petitioner requests the following relief:

1. An evidentiary hearing
2. A new trial, pursuant to Conn. Gen. State. § 52-270 and Practice Book Section 42-55; and
3. Such further relief as this court deems just or equitable.

**THE PETITIONER,
ALFRED SWINTON**

Dated: January 6, 2017

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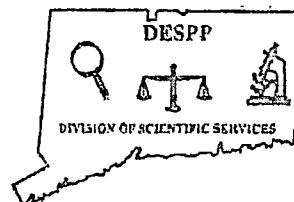
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Exhibit 1



STATE OF CONNECTICUT

DEPARTMENT OF EMERGENCY SERVICES and PUBLIC PROTECTION DIVISION OF SCIENTIFIC SERVICES



Guy M. Vallaro, Ph.D.
Director

DNA UNIT SUPPLEMENTAL DNA REPORT IV

LABORATORY CASE #: ID91A0134X2

SUBMITTING AGENCY: Chief State's Attorney's Office
300 Corporate Place
Rocky Hill, CT 06067

AGENCY CASE #: 91-2179 (Hartford Police Department)

DATE OF REQUEST: 07/21/14

DATE OF REPORT: 06/25/15

EVIDENCE DESCRIPTION:

#1-LB1G1 Cutting, white cloth; jeans
#1-LB1G2 Cutting, denim; jeans
#1-LB2 Cutting, yellowish cloth (blood-like stain - back pocket)
#6 (#211) Known blood sample, A. Swinton
#7 (#250) Swab, right breast
#8 (#251) Swab, left breast
#9-R1 (#242) Swab, mouth area of beer can
#10-R1 (#243) Tip, cigarette filter
#11 (#241) Known blood sample, C. Terry

RESULTS OF EXAMINATION:

1. DNA was previously extracted from items #1-LB1G1, #1-LB1G2, #1-LB2, #7, #8, #9-R1 and #10-R1 (see DNA Report and Supplemental DNA Report dated 05/16/00, 02/02/01). DNA was previously extracted and analyzed from items #6 and #11 (see DNA Report dated 07/29/14). Extracted DNA obtained from items #1-LB1G1, #1-LB1G2, #1-LB2, #7, #8, #9-R1 and #10-R1 was amplified by the AmpF/STR Identifiler Plus procedure. STR alleles were separated and detected. The results are consistent with a laboratory staff member being a contributor to the DNA profile from item #1-LB1G2.

SUPPLEMENTAL DNA REPORT IV**RESULTS OF
EXAMINATION
CONTINUED:**

2. The following results were obtained on the amplified items:

Identifiler Plus Alleles Detected

Item #	D8S1179	D21S11	D7S820	CSF1PO	D3S1358	TH01	D13S317	D16S539	D2S1338
1-LB1G1	13	32,2	9,13	NR	16	8,*	11	NR	24
1-LB1G2	11,14,15,*	31,31.2,*	10,13	11,12	15,16,*	6,7	11,12	11,12,*	17,23,24
1-LB2	14	28,35	10	8,*	14,16	6	12,13	9,10	*
6	10,14	31,36	10,13	10,11	16	7,9	12,13	9,11	22
7	10,13	NR	NR	NR	16,*	6	NR	NR	*
8	NR	*	NR	NR	14,16	9,3	NR	NR	NR
9-R1	12,13	29,32.2	*	13	16,*	6,*	13,*	9,*	NR
10-R1	11,13,14,15	28	12,13	11,*	15,16,18	6,9	9,11	11,12	*
11	14	28,35	10	7,8	14,16	6	12,13	9,10	18,21

Item #	D19S433	vWA	TPOX	D18S51	AMEL	D5S818	FGA
1-LB1G1	13,14	18	8,*	NR	X	*	*
1-LB1G2	12,13,14,15.2,*	17,18,*	8,11	13,19,*	X,Y	10,11,12	22,23
1-LB2	13,14	15,16	9,11	15,18	X	12,13	19,25
6	13,13.2	16,17	8,10	14,17	X,Y	10,12	19,20
7	11,12,13,14,16,*	16,*	NR	*	X,Y	8,*	NR
8	NR	*	NR	NR	X	NR	NR
9-R1	13,14,15	16,18	8,*	*	X	11	*
10-R1	12,13,14,15	14,16,17	8,11	14,16	X,Y	11,12,13	23,24
11	13,14	15,16	9,11	15,18	X	12,13	19,25

* = Additional minor peak(s) detected. NR = No Results.

CONCLUSIONS:

4. The results are consistent with item #1-LB1G1 being a mixture. A. Swinton and C. Terry are eliminated as contributors to the DNA profile from item #1-LB1G1.

The DNA profile from item #1-LB1G1 is insufficient for entry into the Connecticut and National DNA Databases.

5. The results demonstrate that item #1-LB1G2 is a mixture. A. Swinton and C. Terry are eliminated as contributors to the DNA profile from item #1-LB1G2.

The profile from item #1-LB1G2 is not appropriate for entry into the Connecticut and National DNA Databases.

6. C. Terry cannot be eliminated as the source of the DNA profile from item #1-LB2, therefore it is not appropriate for entry into the Connecticut and National DNA Databases. The expected frequency of individuals who cannot be eliminated as the source of the DNA profile (at all loci tested except: CSF1PO and D2S1338) from item #1-LB2 is less than 1 in 7 billion in the African American, Caucasian, and Hispanic populations.

The results eliminate A. Swinton as the source of the DNA profile from item #1-LB2.

SUPPLEMENTAL DNA REPORT IV**CONCLUSIONS
CONTINUED:**

7. The results demonstrate that item #7 is a mixture. A. Swinton and C. Terry are eliminated as contributors to the DNA profile from item #7.

The DNA profile from item #7 is insufficient for entry into the Connecticut and National DNA Databases.

8. The results eliminate A. Swinton and C. Terry as the source of the DNA profile from item #8. The DNA profile from item #8 is insufficient for entry into the Connecticut and National DNA Databases.

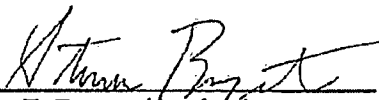
9. The results are consistent with item #9-R1 being a mixture. A. Swinton and C. Terry are eliminated as contributors to the DNA profile from item #9-R1.

The DNA profile from item #9-R1 was entered into the Connecticut and National DNA Databases. The submitting agency will be notified of any positive associations.

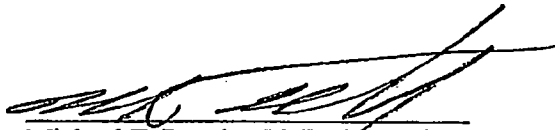
10. The results demonstrate that item #10-R1 is a mixture. A. Swinton and C. Terry are eliminated as contributors to the DNA profile from item #10-R1.

The DNA profile from item #10-R1 was entered into the Connecticut and National DNA Databases. The submitting agency will be notified of any positive associations.

This report reflects the test results, conclusions, interpretations, and/or the findings of the analyst as indicated by their signature below.



Steven E. Bryant (Analyst)
Forensic Science Examiner 1



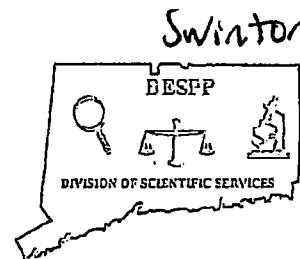
Michael T. Bourke, Ph.D. (Technical Reviewer)
Forensic Science Examiner 2

Exhibit 2



STATE OF CONNECTICUT

DEPARTMENT OF EMERGENCY SERVICES and PUBLIC PROTECTION DIVISION OF SCIENTIFIC SERVICES



Guy M. Vallaro, Ph.D.
Director

DNA SECTION SUPPLEMENTAL DNA REPORT

LABORATORY CASE #: ID91A0134X2

SUBMITTING AGENCY: Chief State's Attorney's Office
300 Corporate Place
Rocky Hill, CT 06067

AGENCY CASE #: 91-2179

DATE OF REQUEST: 07/21/14

DATE OF REPORT: 09/04/14

EVIDENCE DESCRIPTION:

- #6 (#211) Known blood sample, A. Swinton
- #11 (#241) Known blood sample, C. Terry
- #18 #207 Envelope with " One (1) black bra (St's Exh #79)."
#18-S1 Swabbing - inside surface of bra
- #19 #451 Envelope with " Four (4) pairs of white socks (St's Exh #101A-D)."
 - #19-1 One (1) pair of light tannish socks
 - #19-1a One (1) tannish sock
 - #19-1aS1 Swabbing - inside surface of tannish sock
 - #19-1b One (1) tannish sock
 - #19-1bS1 Swabbing - inside surface tannish sock
 - #19-1S1 Trace material - pair of light tannish socks
 - #19-2 One (1) whitish sock and one (1) light tannish sock
 - #19-2a One (1) whitish sock
 - #19-2aS1 Swabbing - inside of whitish sock
 - #19-2b One (1) light tannish sock
 - #19-2bS1 Swabbing - inside of light tannish sock
 - #19-2S1 Trace materials - whitish sock and light tannish sock
 - #19-3 one (1) light tannish sock and one (1) whitish sock
 - #19-3a One (1) light tannish sock
 - #19-3aS1 Swabbing - inside of light tannish sock
 - #19-3b One (1) whitish sock
 - #19-3bS1 Swabbing - inside of whitish sock
 - #19-3S1 Trace materials - light tannish sock and whitish sock

SUPPLEMENTAL DNA REPORTEVIDENCE DESCRIPTION CONTINUED:

#19-4 One (1) pair of whitish socks
 #19-4a One (1) whitish sock
 #19-4aS1 Swabbing - inside of whitish sock
 #19-4b One (1) whitish sock
 #19-4bS1 Swabbing - inside of whitish sock
 #19-4S1 Trace materials - pair of whitish socks

RESULTS OF EXAMINATION:

1. DNA was previously extracted and analyzed from items #6 and #11 (see DNA Report dated 07/29/14). A color screening test for the presence of blood was performed on item #19-2a. Blood was not detected with this test. Extracted DNA obtained from items #18-S1, #19-1aS1, #19-1bS1, #19-2aS1, #19-2bS1, #19-3aS1, #19-3bS1, #19-4aS1 and #19-4bS1 was amplified by the AmpF/STR Identifiler Plus procedure. STR alleles were separated and detected. No DNA profile was detected from items #19-2aS1, #19-2bS1, #19-3aS1 and #19-3bS1. Items #19-1S1, #19-2S1, #19-3S1 and #19-4S1 were not tested at this time.

2. The following results were obtained on the amplified items:

Identifiler Plus Alleles Detected

Item #	D8S1179	D21S11	D7S820	CSF1PO	D3S1358	TH01	D13S317	D16S539	D2S1338
6	10,14	31,36	10,13	10,11	16	7,9	12,13	9,11	22
11	14	28,35	10	7,8	14,16	6	12,13	9,10	18,21
18-S1	13,14,15	NR	*	NR	15,16,17	7	*	NR	NR
19-1aS1	*	NR	*	NR	*	NR	NR	NR	NR
19-1bS1	*	28	NR	*	*	*	NR	NR	NR
19-4aS1	13,*	*	NR	NR	*	7,9,3	*	NR	NR
19-4bS1	NR	NR	NR	NR	NR	NR	NR	NR	NR

Item #	D19S433	vWA	TPOX	D18S51	AMEL	D5S818	FGA
6	13,13.2	16,17	8,10	14,17	X,Y	10,12	19,20
11	13,14	15,16	9,11	15,18	X	12,13	19,25
18-S1	12,13,14	*	NR	NR	X,Y	11	NR
19-1aS1	13	NR	NR	NR	X	*	21
19-1bS1	*	NR	NR	NR	*	NR	NR
19-4aS1	*	NR	NR	NR	NR	NR	*
19-4bS1	*	NR	NR	NR	NR	NR	NR

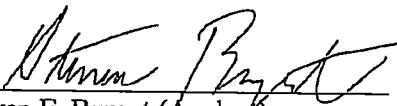
* = Additional minor peak(s) detected. NR = No Results.

3. Items #18-S1, #19-1aS1, #19-1bS1, #19-2aS1, #19-2bS1, #19-3aS1, #19-3bS1, #19-4aS1 and #19-4bS1 were consumed in testing. Items #19-1S1, #19-2S1, #19-3S1 and #19-4S1 were retained at the Laboratory. Items #18 and #19 were returned to the appropriate Submitting Agency.

SUPPLEMENTAL DNA REPORTCONCLUSIONS:

4. A. Swinton and C. Terry are eliminated as sources of or contributors to the DNA profiles from items #18-S1, #19-1bS1 and #19-4aS1.
5. Insufficient amplification products were detected from item #19-4bS1 for comparison to A. Swinton and C. Terry.
6. The results are consistent with a laboratory staff member being the source of the DNA profile from item #19-1aS1, therefore the DNA profile from item #19-1aS1 is not suitable for any comparisons. The profile from item #19-1aS1 is not appropriate for entry into the Connecticut and National DNA Databases.
7. The DNA profiles from items #18-S1, #19-1bS1, #19-4aS1 and #19-4bS1 are not appropriate for entry into the Connecticut and National DNA Databases.

This report reflects the test results, conclusions, interpretations, and/or the findings of the analyst as indicated by their signature below.


Steven E. Bryant (Analyst)
Forensic Science Examiner 1

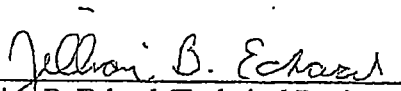

Jillian B. Echard (Technical Reviewer)
Forensic Science Examiner 2

Exhibit 3

AFFIDAVIT OF CONSTANTINE P. KARAZULAS, DDS

I, Dr. Constantine Karazulas, hereby declare as follows:

PROFESSIONAL EXPERTISE AND BACKGROUND

1. I am a forensic odontologist in Bridgeport, Connecticut. I graduated from Temple University Dental School in 1959 with a Doctor of Dental Surgery degree.

2. I practiced general dentistry for fifty years, and I also have a specialty in forensic dentistry. I was the Chief Forensic Odontologist of the Connecticut State Police Forensic Science Laboratory for over 25 years, beginning in 1980, and have served as a consultant to police departments throughout Connecticut. I have taught forensic odontology and crime scene preservation as an adjunct professor at the University of New Haven, and have lectured on these topics at law enforcement agencies, law schools, and other institutions throughout the world. I have been qualified as an expert in forensic odontology, specifically in bite-mark analysis and comparison, in state courts in Connecticut and Pennsylvania. I am a Fellow of the American Academy of Forensic Science (Ret.), a member of the American Society of Forensic Odontology (Ret.), and the International Association of Identification (Ret.). I have reviewed, investigated, and consulted on thousands of bite mark cases over the course of my career.

TESTIMONY IN THE SWINTON CASE

3. In 2001, I testified as a forensic odontology expert on behalf of the prosecution in the case of *State v. Alfred Swinton*, No. CR98-528664, regarding the murder of Ms. Carla Terry. The testimony on my bite-mark analysis, both on direct and cross-examination, spanned roughly 5 days of the trial.

4. I first became involved in the Swinton case in 1998. Prior to that time, Dr. Lester Luntz had been serving as a forensic odontology expert for the prosecution, although he was unable to conclusively match Mr. Swinton's teeth to the bite-mark on Ms. Terry's body. After

Dr. Luntz passed away, I was approached by a Connecticut District Attorney, Joan Alexander, and shown Dr. Luntz's photographs of injuries on Ms. Terry's body, along with plaster molds that Dr. Luntz had made of Mr. Swinton's dentition. I never examined Ms. Terry's body, and I never personally made any molds of Mr. Swinton's teeth (although I visually examined Mr. Swinton's teeth at the time of his trial in 2001).

5. During my review, I observed injuries from the photographs of Ms. Terry's breasts that I determined were human bite marks.

6. Pursuant to the then-current best practices for bite-mark analysis, I created overlays of the biting surfaces of Mr. Swinton's teeth—i.e., his "dentition"—from the plaster molds, and compared those overlays to photographs of the bite mark. I examined unenhanced photographs that Dr. Luntz had taken of the injuries to Ms. Terry. I also enhanced the photographs of Ms. Terry that Dr. Luntz had taken using Photoshop and specialized imaging software from Image Content Technology, called Lucis. I used Lucis to produce a clearer view of the injuries to Ms. Terry than could be seen by the naked eye. I scanned the plaster mold of Mr. Swinton's teeth into Photoshop to obtain a digital image of the biting edges of his teeth, and then electronically superimposed that digital image over both the enhanced and unenhanced photographs of Ms. Terry's injuries.

7. I did not file or serve a report in the Swinton case that contained my conclusions regarding the injuries on Ms. Terry's body. Instead, I offered trial testimony based on a comparison of the enhanced and unenhanced photographs of Ms. Terry's injuries to the molds that Dr. Luntz had made.

8. Based on my training and experience, and on the consensus of the scientific community as of 2001, I testified that Mr. Swinton's dentition was unique, and that the principles

of bite-mark identification were widely accepted as a technique capable of identifying the individual responsible for an injury. Utilizing the scientific knowledge and standards accepted at the time I testified at Mr. Swinton's trial, I was able to opine that I was reasonably certain that Mr. Swinton was the individual responsible for the bite marks that I observed on the victim.

9. Accordingly, I testified at trial to "a reasonable medical certainty without any reservation that these [bite] marks were created by Mr. Swinton." This conclusion was "individualization" testimony, because it identified Mr. Swinton as the biter.

10. I also testified to a reasonable degree of medical certainty that the bite mark was inflicted within 10 minutes of the victim's death.

11. The scientific knowledge and understanding on which these conclusions were based, however, has changed significantly since I offered my testimony at Mr. Swinton's trial in 2001. This new scientific knowledge has caused me, as well as the broader scientific community, to reevaluate the validity and reliability of bite-mark analysis. Based on my current understanding of this technique, I no longer believe to a reasonable medical certainty—or to any degree of certainty—that Mr. Swinton was responsible for the bite marks found on Ms. Terry's body. I am therefore formally recanting the testimony that I gave at Mr. Swinton's trial, as discussed in greater detail below.

The National Academy of Sciences Report

12. In 2009, the National Academy of Sciences ("NAS"), this country's most prestigious scientific organization that provides objective, science-based advice on critical issues of national interest, issued a groundbreaking report ("the NAS Report") that specifically addressed bite-mark analysis. The NAS Report included the first independent examination of the

validity and reliability of bite-mark evidence by a neutral committee of scientists, and represents the most comprehensive assessment of bite-mark analysis to date.

13. The NAS Report thoroughly reviewed and analyzed bite-mark literature and research. The NAS determined that there was no scientific basis for forensic odontologists to proffer individualization testimony—namely, testimony concluding that a suspect is "the biter" to the exclusion of all other potential sources of that bite mark.

- a. Specifically, the NAS found that the requisite research has not been done to allow a forensic odontologist to reliably individualize a known dentition (i.e., the biting surfaces of teeth) to an unknown bite mark. The report emphasized that "[t]he committee received no evidence of an existing scientific basis for identifying an individual to the exclusion of all others." *NAS Report*, at 176. This conclusion remains the case today.
- b. Further, bite-mark examiners cannot testify to the rarity or probative value of a "match" because no base rate data regarding the characteristics of teeth and bite patterns exists. *Id.* The NAS found that "no scientific studies support this assessment, and no large population studies have been conducted." *NAS Report*, at 176. In other words, if a "match" is declared, there is no information concerning how many other dentitions might also "match" the putative bite mark. This conclusion remains the case today.
- c. The NAS concluded that forensic odontologists lack "the capacity to consistently, and with a high degree of certainty, demonstrate a connection between evidence and a specific individual or source." *NAS Report* at 7; *see also id.* at 175 ("[T]he

scientific basis is insufficient to conclude that bite mark comparisons can result in a conclusive match."). This conclusion remains the case today.

- d. Put simply, the NAS Report undermined the two fundamental premises underlying bite mark analysis: (i) that human dentition is unique and, (ii) if so, that the human skin is a reliable and accurate medium for recording its unique features. *Id.* at 174 ("[B]ite marks on the skin will change over time and can be distorted by the elasticity of the skin, the unevenness of the surface bite, and swelling and healing. These features [of skin] may severely limit the validity of forensic odontology."). Those two fundamental premises of bite-mark analysis remain unproven today.

14. I first learned of the NAS Report when I attended a meeting of the National Institute of Justice in Kansas City in 2009. Given that the conclusions in this Report directly contradicted the basic premises of the very bite-mark analysis that I and other forensic odontologists had practiced for years, I carefully studied the NAS Report, as well as other scientific literature, to fully understand the new post-Report consensus in the forensic odontology community.

15. The NAS Report and my subsequent research marked a turning point in my professional career. Based on the NAS Report, as well as my other research and experience, I now understand and believe that human dentition is not uniquely capable of producing a given bite mark, and that human skin is unable to reliably and accurately record the features of human dentition. Put differently, bite-mark analysis has not been scientifically validated or demonstrated to be reliable. These new scientific developments caused a significant change to

my understanding of bite-mark analysis, and have compelled me, as a matter of my professional ethics and civic duty, to recant completely the testimony that I gave at Mr. Swinton's trial.

RECANTATION OF SPECIFIC TRIAL TESTIMONY

16. At trial I testified broadly about my understanding of bite-mark analysis as follows:

Q. Doctor does the scientific community of forensic odontologists accept the reliability of bite-mark identification in the function of both identifying a perpetrator or excluding a perpetrator for the commission of a crime?

A. Yes.

(2/13-2/15 Swinton Trial Tr. at 129:23-130:1)

If asked the same question today, I would answer "No." Although I cannot speak directly for the various organizations and boards in the forensic odontology community, it is my impression that the scientific community of forensic odontologists no longer accepts the reliability of bite-mark comparison to identify a perpetrator for the commission of a crime. While that testimony at Mr. Swinton's trial was consistent with the scientific understanding *as it then existed in 2001*, I would not and could not offer such testimony today. The testimony that I gave is no longer consistent with the current scientific understanding of bite-mark analysis, and I am therefore recanting it.

17. I also identified Mr. Swinton as the individual who bit Ms. Terry. While that testimony was consistent with the scientific understanding as it then existed in 2001, I would not and could not offer such testimony today, because of how the scientific understanding of bite-mark analysis has changed since then.

18. Specifically, I testified as follows:

THE COURT: No. The question was: Do the defendant's - - did the defendant's dentition as captured in the models - -
MR. MASSAMENO: Yes, that's the question.

THE COURT: -- cause the bite marks on the victim's breast?

Q. Do you have such an opinion?

A. Yes, I do.

Q. And Doctor, what is that opinion?

A. I believe that with reasonable medical certainty without any reservation that these marks were created by Swinton's teeth.

Q. And that opinion, sir, is based on what?

A. On my observation of the upper and lower bite marks an[d] their relationship to the models and the tracings. And with the availability of new programs to allow us to see things more clearly, I have no doubt that I can say with reasonable medical certainty, which means I believe these are unique and belong to one person.

(2/16 Swinton Trial Tr. at 97:4-23)

Q. And, Doctor, do you have an opinion based upon a reasonable degree of medical certainty as to whether the defendant's teeth as represented in these models, 107 and 108, caused the outer bite marks that appear on the left breast of the victim, Carla Terry?

A. Yes.

Q. And would you tell the members of the jury what that opinion is?

A. I believe with reasonable medical certainty that the same teeth made the same mark.

(2/16 Trial Tr. at 98:3-99:5)

I no longer believe with reasonable medical certainty—or with any degree of certainty—that the marks on Ms. Terry were created by Mr. Swinton's teeth, because of the recent developments in the scientific understanding of bite-mark analysis. For the same reason, I likewise no longer believe that Mr. Swinton's dentition was uniquely capable of producing the bite marks I observed in the photographs of Ms. Terry. It is my opinion that an individual other than Mr. Swinton could have caused the bite marks that I observed in the photographs of Ms. Terry. Indeed, many thousands of other individuals could have produced those injuries. The above testimony that I gave is no longer consistent with the current scientific understanding of bite-mark analysis, and I am therefore recanting it.

19. In addition, I testified as follows:

Q. Thank you. Doctor, then based on the testimony that you provided what would be the total number of unique characteristics in both the upper and lower dentitions of the defendant that correspond to the bite mark on Carla Terry's breast?

A. Fifteen areas.

Q. And that's both in upper and lower bite marks?

A. Yes.

Q. And how frequently are you, as a forensic odontologist, confronted with fifteen areas of corresponding, unique characteristics in both the upper and lower dentition on a bite mark for analysis?

A. In my experience very few.

Q. And the existence of that total number of fifteen unique characteristics, what level of confidence does that provide for you as a forensic odontologist in testifying here that this bite mark to a -- belongs to the defendant?

A. With reasonable medical certainty I believe this to be unique and caused by one individual or one set of teeth.

(3/15 Swinton Trial Tr. at 47:14-48:4)

That is no longer my opinion, because of how the scientific understanding of bite-mark analysis has changed since the time that I testified. I am therefore recanting this testimony. Based on the understanding that I have recently come to, I would no longer offer testimony as to the uniqueness of any portions of Mr. Swinton's dentition, or whether those portions corresponded to the injuries on Ms. Terry's breasts. There are two reasons for this change in my approach. First, I now understand that it is not possible to accurately measure and scientifically compare anything other than the arch of an individual's dentition. Second, I have become convinced, given the recent changes in scientific knowledge and understanding in my field, that skin is not capable of accurately recording the characteristics of human dentition, making it impossible to identify "the biter" with any degree of certainty.

20. Moreover, there is neither current support in the literature nor any scientific proof for any statistical estimation of how likely it was that Mr. Swinton produced the bite marks found on Ms. Terry. Therefore, I would no longer offer either individualization or probabilistic conclusions, e.g., "probable" or "likely" biter, because there is no information as to how many other people might also have made the bite mark. In other words, I could not offer any testimony as to how likely it was that Mr. Swinton produced the marks on Ms. Terry's breasts.

21. In addition, I testified as follows:

Q. But you do not have any opinion on how many other people in the world may have similarities consistent with that teeth - - with these teeth. Isn't that true?

A. I said it was unique to one person.

Q. I know. But you don't have any opinion about whether these are similar to anyone else's dentition?

A. I do have an opinion.

Q. And that is they are not?

A. They are not consistent to anybody else.

(2/16 Swinton Trial Tr. at 143:24-144:5)

Although that opinion reflected the scientific understanding of the uniqueness of human dentition at the time, that is no longer the case. I am therefore recanting this testimony.

22. The only dentition that I examined in connection with my analysis of Ms. Terry's injuries was Mr. Swinton's. Today, that is no longer an accepted practice for forensic odontologists performing bite-mark comparisons in criminal cases; a forensic odontologist cannot reach a scientifically supportable identification of a biter by examining only the dentition of a single individual. Indeed, that is particularly true with Mr. Swinton, who appeared to have received orthodontic treatment.

23. I also identified the injury on the breasts of Ms. Terry as having been inflicted within ten minutes of her death. I broadly based this conclusion on my experience and the

experiments I conducted. However, contemporary scientific understanding does not support such a finding, and I am therefore recanting that testimony as well.

SUBSEQUENTLY DISCOVERED DNA EVIDENCE

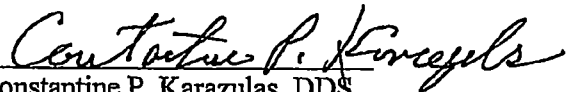
24. After I had reviewed the NAS Report, determined that human dentition is not uniquely capable of producing a given bite mark, and decided to recant completely the testimony that I gave at Mr. Swinton's trial, I was subsequently informed that certain DNA evidence taken from the injuries of the victim excluded Mr. Swinton as a source of that evidence. Separate and apart from my recantation based on the scientific developments since Mr. Swinton's trial, had I known about this DNA evidence in 2001, I would not have offered testimony identifying Mr. Swinton as the sole individual who produced the marks on Ms. Terry's breasts.

CONCLUSION

25. The scientific understandings on which my conclusions at Mr. Swinton's trial were based have now been significantly altered, if not entirely repudiated by the authoritative experts in the field of forensic odontology. This change in scientific understanding is reflected in, among other things, the 2009 NAS Report. Today, based on my review of the literature and my awareness of the numerous wrongful convictions associated with bite-mark comparison evidence, I have realized that bite-mark analysis and comparison is not a reliable forensic technique for identifying a biter to the exclusion of all other potential biters. I therefore am recanting the testimony that I gave at Mr. Swinton's trial.

26. I have offered this recantation of my own free will, without receiving any payment or any other consideration from Mr. Swinton or any other person or entity. I am offering this recantation because I no longer believe and can no longer stand behind the opinions that I offered at Mr. Swinton's trial, and I wish to make the truth known.

I declare under penalty of perjury that the foregoing is true and correct.


Constantine P. Karazulas, DDS

Sworn to me this 8th of July, 2016.



Notary Public

Fairfield CT

County State

February 28, 2018
My commission expires:

Leonard J Whitlock
Notary Public
State of Connecticut
My Commission Expires Feb. 28, 2018

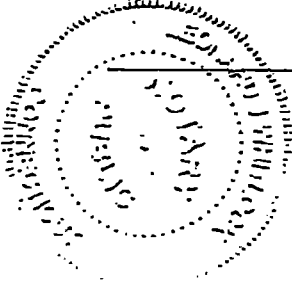


Exhibit 4



STATE OF CONNECTICUT

DEPARTMENT OF PUBLIC SAFETY
DIVISION OF STATE POLICE
FORENSIC SCIENCE LABORATORY

TOWN OF
INCIDENT: Hartford

DATE OF
REQUEST: 01/23/91

SUBMITTING
AGENCY: Hartford Police Dept.

DATE OF
REPORT: 05/04/92

REPORT
TO: Chief of Police as above

LOCAL
CASE #: 91-2179

LABORATORY
CASE #: ID91A0134X2

ITEMS SUBMITTED:

- # 1. Plastic bag
- 201. Sock
- 202. "Hair samples"
- 203. Handkerchief
- 204. Two (2) pairs of slacks (#204A, #204B)
- 205. Jacket
- 206. Jeans
- 207. Bra
- 208. Saliva sample, "suspect"
- 209. Pubic hair, "A. Swinton"
- 210. Head hair, "A. Swinton"
- 211. Blood sample, "A. Swinton"
- 212. Knife
- 213. Cloth
- 214. Washcloth
- 215. Piece of carpet
- 216. Pants
- 217. "Bath mat"
- 218. Cushion
- 219. Blanket
- 220. "Tarp"
- 221. Cushion
- 222. "Two seat cushions"
- 224. Bag with "clothing" (#224A - #224E)
- 225. Blanket
- 226. Seat pad
- 227. Blanket
- 228. Wash cloth

Phone

294 Colony Street, Meriden, CT 06450-2098

An Equal Opportunity Employer

ITEMS

CONTINUED:

- # 229. Four (4) knives (#229A - #229D)
- 230. Cloth
- 231. "Two (2) vinyl covers"
- 232. Carpet ("mustard color")
- 233. Carpet ("Green")
- 234. "Foam padding"
- 235. Three (3) knives (#235A - #235C)
- 236. Carpet ("Indoor/outdoor")
- 237. "Hair particles"
- 238. "Hunting knife"
- 239. "Hair particles"
- 241. Blood sample, "C. Terry"
- 250. "Swab from right breast"
- 251. "Swab from left breast"
- 401. Jacket
- 402. Jacket
- 403. Shirt
- 404. Pair of boots (#404A, #404B)
- 405. Jacket
- 406. Fingernail scrapings (#406L1 - L5, R1 - R5)
- 407. Head hair, victim
- 408. Pubic hair, victim
- 409. "Combed pubic hair"
- 410. "Foreign material...victim's neck"
- 411. Jeans

RESULTS OF
EXAMINATIONS:

1. Item #1 contained a damaged, plastic bag with a yellow plastic drawstring.

A. The plastic bag in item #1 was brown in color and composed of a polyethylene-type material.

B. The dimensions of the "cut" open bag were approximately fifty-eight (58) inches by thirty-seven (37) inches. The inside width of the portion containing the drawstring was approximately two and one half (2.5) inches. The yellow drawstring itself was approximately one (1) inch wide.

C. White cotton fibers were located on item #1.

D. Item 31 was forwarded to the Latent Fingerprint section of the Laboratory for examination. (See attached report.)

2. Item #201 contained one white sock.

A. Various stains and other areas of item #201 gave negative results when tested for the presence of blood.

B. human Negroid-type head hairs were located on item #201. These hairs demonstrated microscopical characteristics dissimilar to those from the victim in item #407.

C. Human Negroid-type body hairs and one (1) animal hair were also found on item #201.

3. Item #202, "Hairs from blankets in sleeping area", was found to contain:

A. Animal hairs

B. Human Negroid-type body hair

C. Various fibers

4. Item #203 was a white handkerchief.

A. Various stains on item #203 gave negative results when tested for the presence of blood.

B. Human head hair demonstrating characteristics dissimilar to hairs in item #407 and animal hair were found on item #203.

5. Item #204 was found to contain two (2) pairs of pants, designated item #204A and #204B.

A. Various stains on items #204A and #204B gave negative results when tested for the presence of blood.

B. Human Negroid-type hair fragments, insufficient for comparison purposes, and Negroid-type body hairs were found on items #204A and #204B.

C. Mineral particles, fibers, and/or other trace materials were also found on these items.

6. One(1) "Parkee"-brand jacket was found in item #205.

A. Various stains on item #205 gave negative results when tested for the presence of blood.

B. Negroid-type body hair, mineral particles, and gray-colored debris were noted on item #205.

7. Item #206 contained a pair of "Women's" blue jeans.

A. Stains on item #206 gave negative results when tested for the presence of blood.

B. Negroid-type hair fragments, insufficient for comparison purposes, were found on item #206.

C. Various fibers, animal hairs, and other trace materials were found on item #206.

8. Item #207 consisted of a black bra. No label was noted on the bra.

A. No blood-like stains were noted on item #207.

B. Various natural and synthetic fibers were located on item #207.

9. Item #208 was a saliva sample from "Alfred Swinton".

A. The stain on item #208 gave positive results when tested for the presence of amylase.

B. Antigenic substances "A", "B", and "H" were detected in the stain on item #208.

10. Item #211, a blood sample from "Alfred Swinton", demonstrated the following genetic markers: "AB", "Le (a-b+)".

11. Item #212 contained one (1) steak-type knife.

Item #229 contained four (4) "knives". (#229A - #229D)

Item #235 contained three (3) knives. (#235A - #235C)

Item #238 contained one (1) knife.

A. Deposits on item #212 gave weak positive results with a chemical screening test for blood. An extract of this area gave negative results when tested for the presence of human protein.

B. Various areas tested of items #229A, #229B, #229C, #229D, #235A, #235B, #235C, and #238 gave negative results when tested for the presence of blood.

C. Various cotton fibers were located on item #212.

D. Fibers were also noted on knives in item #212, #229, and #235.

12. A brown cloth was found in item #213.

A. Oil-type stains were noted on item #213. Other stain areas gave negative results when tested for the presence of blood.

B. One (1) animal hair was located on item #213.

13. Item #214 contained a washcloth.

A. Various stains on item #214 gave negative results when tested for the presence of blood.

B. Trace materials located on item #214 included:

(1) Negroid-type body hair and hair fragments

(2) Various fibers

(3) Mineral particles

(4) Vegetative material

14. Items #215, #217, #232, and #236 contained various carpets or pieces of carpeting.

A. Various trace materials were noted on these items .

(1) Trace materials from items #232 and #236 were not collected at this time.

(2) No Negroid-type hairs demonstrating characteristics similar to those from the victim in items #407 and #408 were found in the trace materials collected from items #215 and #217.

B. Stains noted on the carpets in items #215, #217, #232 and #236 gave negative results when tested for the presence of blood.

15. Item #216 contained a pair of pants.

A. Various stains on item #216 gave negative results when tested for the presence of blood.

B. Human Negroid type head hair fragment demonstrating characteristics dissimilar to head hairs in item #407 were found on item #216.

C. Negroid-type body hairs, fibers, animal hairs, and various other trace materials were also located on item #216.

16. Item #218 contained a foam cushion.

A. Stains on item #218 gave negative results when tested for the presence of blood.

B. Human Negroid-type head hairs on item #218 demonstrated characteristics dissimilar to those of hairs in item #407.

C. Negroid-type body hairs, hair fragments, animal hairs and other trace materials were found on item #218.

17. Items #219, and #227 each contained a blanket.

Item #225 contained one(1) piece of carpeting (#225A), one (1) sock (#225B), one (1) T-shirt (#225C), and one (1) blanket (#225D).

A. No bloodstains were located on items #219, #225D, and #227.

B. Various trace materials were located on these blankets.

(1) Negroid-type head hairs dissimilar to hairs in item #407.

(2) Trace materials from items #225D and #227 were not collected and examined at this time.

18. Item #226 consisted of a seat pad.

A. Stains on item #226 gave negative results when tested for the presence of blood.

B. Trace materials located on item #226 included:

(1) Human Negroid-type pubic hairs demonstrating characteristics dissimilar to hairs in item #408 from the victim.

(2) Animal hairs

(3) Various fibers

(4) Vegetation, mineral particles, an other trace materials.

19. Item #241, blood sample from C. Terry, demonstrated the following genetic markers: "O", "Le (a-b+)".

20. Items #250 and #251 each contained a swab collected at autopsy.

A. Amylase was detected on the swabs in items #250 and #251.

B. No antigenic substance were detected in extracts of these swabs using standard serological methods.

21. Submitted items #401, #402, #403, #404, #405, and #411 contained clothing from the victim as listed above.

A. Bloodstains were noted on items #401, #402, #403, #405B (right shoe), and #411. No further serological analyses were conducted on the bloodstains noted at this time.

B. Human Negroid-type head hair fragments were located on item #403. Some of these hairs were insufficient for comparison purposes; other fragments demonstrated microscopical characteristics similar to hairs in item #407.

C. Human Negroid-type body hairs or hair fragments were located on items #401, #403, and #405.

D. Various fibers were located on items #401, #402, #403, #404B, #405 and #411. These fibers demonstrated microscopical characteristics dissimilar to fibers composing items #215, #217, #225A, #227, #232 and #236.

E. Animal hair was found on items #402 and #404A (Left shoe).

F. No semen-type stains were located on these items.

22. No trace materials were located in the fingernail scrapings from the victim, submitted items #406L1 - L5 and #406R1 - R5.

23. Item #409 was found to contain a comb (#409A) and a folded paper packet (#409B).

A. Reddish-brown crusty material located in items #409A and #409B gave weak positive results when tested for the presence of acid phosphatase.

(1) No spermatozoa were located in extracts of this material.

(2) These extracts gave negative results when tested for the presence of human seminal protein and positive results for the presence of human blood.

B. Human Negroid-type pubic hairs located on item #409A and in item #409B demonstrated microscopical characteristics similar to pubic hairs from the victim in item #408.

C. Various fibers were located in items #409A and #409B. These fibers demonstrated microscopical characteristics dissimilar to those of fibers composing submitted items #215, #217, #225A, #227, #232 and #236.

24. Item #410, "Foreign material from neck", was found to contain a piece of tape. The following materials were identified on this tape:

A. Negroid-type hair fragments demonstrating insufficient characteristics for comparison purposes.

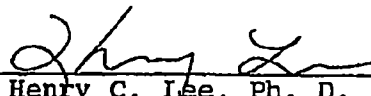
B. Tissue-like material and blood crusts.

C. Animal hairs.

D. Various natural and synthetic fibers. The fibers examined demonstrated microscopical characteristics dissimilar to those of fibers composing submitted items #215, #217, #225A, #227, #232, and #236.

***Further analysis upon request.

Elaine M. Pagliaro
Supervising Criminalist



Henry C. Lee, Ph. D.
Chief Criminalist

30% POST CONSUMER
RECYCLED PAPER

Exhibit 5



STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC SAFETY
STATE POLICE FORENSIC SCIENCE LABORATORY
278 Colony Street
Meriden, CT 06451

CRIMINALISTICS SECTION
DNA Report

LABORATORY CASE #: ID91A0134X2
cross-ref. ID90C0454X1

SUBMITTING AGENCY: Hartford State's Attorney's Office

AGENCY CASE #: 912179

TOWN OF INCIDENT: Hartford, CT

DATE OF REQUEST: 04/12/00

DATE OF REPORT: 05/16/00

REPORT TO: State's Attorney of above

EVIDENCE EXAMINED:

Submission #0007	Swab, right breast
Submission #0008	Swab, left breast
Item #009-R1	Swab, mouth area
Item #010-R1	Tip, cigarette filter
Submission #0011	Blood sample, C. Terry
Item #211	Blood sample, A. Swinton

RESULTS OF EXAMINATION:

1. DNA was extracted from submissions #0007, #0008, and #0011, and Items #009-R1, #010-R1, and #211. DNA was purified according to standard laboratory protocols.
2. The quality and quantity of the DNA obtained from each sample were analyzed by standard laboratory protocols. Insufficient DNA was recovered from submissions #0007 and #0008 for further testing.
- 3A. Extracted material obtained from items/submissions #009-R1, #010-R1, #0011, and #211 was amplified by the AmpF/STR Profiler Plus procedure as described in laboratory protocols. STR alleles were separated and detected by standard laboratory protocols.

ID91A0134X2
Hartford, CT
912179
Page 2

DNA REPORT

RESULTS OF
EXAMINATION
CONTINUED:

3B. The following results were obtained from Profiler Plus PCR on the items amplified:

Alleles Detected

Item/Sub #	D3S1358	VWA	FGA	AMEL	D8S1179	D21S11	D16S51	D5S818	D13S317	D7S820
009-R1	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
010-R1	15, 16, 18	14, 16, 17	23, 24	X, Y	11, 13, 14, 15	28	14, 16	11, 12, 13	9, 11	12, 13
0011	14, 16	15, 16	19, 26	X	14	28, 35	15, 18	12, 13	12, 13	10
211	16	16, 17	19, 20	XY	10, 14	31, 36	14, 17	10, 12	12, 13	10, 13

NR = no result

4. Submissions #0007 and #0008, and items #009-R1 and #010-R1 were consumed in testing. Submission #0011 and item #211 were retained at the laboratory.

5. Item #010-R1 (tip, cigarette filter) is a mixture. C. Terry (submission #0010) and A. Swinton (item #211) are eliminated as contributors to item #010-R1.


Carl Ladd, Ph.D.
Lead Criminalist


Nicholas CS Yang
Criminalist